

BOOK REPORT

In "Economic Plants"¹ Dr. Stanford has presented a very readable and informative account of plants in their economic relation to man. Beginning with the major and minor forest products of lumber, resins and rubber, he leads the reader through all the great groups that furnish textiles, paper, cereals, sugar, oils, proteins, fruits, spices, beverages, and finally medicines. This account, well illustrated with 376 figures, is a delightful source of information to the general reader. It is to the student, however, that the book should have its greatest appeal for in it are presented those aspects so frequently omitted in most academic training, the correlations between the teachings of plant physiology and anatomy, and the utilization of plants.

E. H. FULLING

FIELD TRIPS OF THE CLUB

TRIP OF AUGUST 5 TO COLD SPRING HARBOR, L. I.

Proceeding westward along the railroad, we skirted a stand of black oak woods, where the characteristic undergrowth has completely covered the railroad cut: *Vaccinium pennsylvanicum*, *V. vacillans*, *Gaylussacia baccata* with black berries or with glaucous ones, various mosses, and the lichen, *Baeomyces roseus*. A springy seep at the north base of the railroad bank yielded *Hypericum canadense*, *Rhexia virginica*, *Rhynchospora glomerata*, *Lycopodium inundatum*, *Apios tuberosa*, and mosses, *Anthoceros laevis*, *Nardia crenulata*, *Aulacomnium palustre* and *Pohlia prolifera*. In the sandy margin of an old field north of the depot *Polytrichum commune* and *P. piliferum* were distinguished along with *Chrysopsis falcata*, *Gnaphalium polycephalum*, *Lactuca spicata*, *Eupatorium hyssopifolium*, *Euphorbia ippecacuanhae*, *Hypericum gentianoides*, *Asclepias amplexicaulis*, *Deschampsia flexuosa*, etc. On the side of a newly cut road bank was exposed a layer of woodland soil covered more than fifty years ago in grading for a projected railroad. There is an opportunity to study the survival of seeds and spores in subterranean storage. Along the sandy roadside there is abundance of *Diodia teres*,

¹ Stanford, E. E., Economic Plants. Pp. 571, figs. 376. D. Appleton-Century Company Inc., New York, \$5.00.

listed some years ago by Norman Taylor as one of the little known plants of Long Island, *Aristida tuberculata*, and *Trichostema dichotoma*.

Thence the old unused railroad bed was traversed to the Biological Laboratory for dinner. After dinner the laboratories were briefly visited, and the *Datura* display of the Carnegie Laboratory was explained by Dr. Cartlege. Dr. Blakeslee, former president of the Club, spoke to us there.

A walk across the salt marsh on a gravel path yielded *Scirpus robustus*, *S. americanus*, *Typha latifolia*, *T. angustifolia*, *Aspidium thelypteris*, *Hibiscus moscheutos*, *Iva oraria*, *Distichlis spicata*, *Juncus gerardi* and *Spartina patens* in glorious contrasting tints of velvety meadow, *Limonium carolinianum*, *Solidago sempervirens*, *Buda marina*, *Plantago decipiens*, *Spartina glabra alterniflora*, and the algae *Ulva latissima*, *Enteromorpha intestinalis*, *E. clathrata*, *Ascophyllum nodosum* and *Fucus sp.*

The New York State Fish Hatchery furnished a fine display of water-loving mosses and liverworts: *Amblystegium irriguum*, *Chiloscyphus rivularis*, *Brachythecium rivulare*, *Climacium kindbergii*, *Fontinalis novae-angliae* and *Marchantia polymorpha*. The shores of St. John's Pond proved rich in liverworts, mosses and vascular plants: *Gratiola aurea*, *Hypericum virginianum*, *Callitriche palustris*, *Lycopodium lucidulum*, *Woodwardia areolata*, *Riccia fluitans*, *Lophocolea bidentata*, *Odontoschisma prostratum*, *Pallavicinia lyellii*, *Georgia pellucida*, *Dicranum flagellare*, *Hypnum imponens*, *Bryhnia novae-angliae*, *Drepanocladus exannulatus*.

The route to the Laboratory covered about three miles. We were mostly in the oak-chestnut forest of Shantz & Zon, first in the dry black oak phase and then in the more mesic chestnut oak phase with *Kalmia latifolia*. At the moist cool margin of St. John's Pond we have a fragment of the birch-beech-maple-hemlock forest of Shantz & Zon, with *Betula lenta* abundant and a considerable amount of beech and *Betula lutea*. The moist areas of these formations furnished our hygrophilous flowers and mosses. Finally, the salt marsh gave us the marginal maritime vegetation of a protected saltwater cove. These numerous vegetational zones account for the richness of the flora in so short a hike. A half mile more would have taken us into the beech-grass (*Ammophila*) association, but time was limited.

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